Antidegradation Analysis: EPA preliminary answers

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Sources:

Washington Department of Ecology. *Water Quality Program Guidance Manual: Supplemental Guidnace on Implementing Tier II Antidegradation*. Publication No. 11-10-073. September 2011.

Washington Department of Ecology. Antidegradation: http://www.ecy.wa.gov/programs/wq/swqs/antideg.html

EPA, 2015. *Fact Sheet for Washington Hatcheries General Permit*, pages 47-50. https://www3.epa.gov/region10/pdf/permits/npdes/wa/WA_Hatchery_GP_WAG130000_FS.pdf

1. When is an anti-degradation analysis needed for a 401 certification in permitting?

Section 401 of the Clean Water Act states that EPA may not issue a final permit until the State or tribe where the discharge originates has granted or waived 401 certification. The State and tribes must either certify that the permit complies with State or tribal water quality standards, or waive certification before the final permit is issued.

Antidegradation requirements are part of federal and state regulations that are part of the water quality standards, which EPA is required to meet when establishing NPDES permits. There are three ties of antidegradation analysis. Depending on whether the water is impaired (Tier I), of higher quality than the water quality standards (Tier II), or outstanding waters (Tier III), there are different analyses. If the analysis determines that the discharges are not

2. **Who is responsible for doing the anti-degradation analysis?**

Federal regulations and the State of Washington both establish water quality antidegradation programs for surface waters. It is unclear whether one entity must legally do the anti-degradation analysis. However, since there are state-specific anti-degradation rules and recommended guidance, EPA's experience has been that the State typically completes the anti-degradation analysis or requests the permittee to complete the analysis and reviews that.

3. What does the analysis include?

4. For the LNFH facility, is a Tier 1 or Tier 2 analysis required?

The following are Washington's definition of Tier 1 and Tier 2 waters:

- **Tier I**. WAC 173-201A-310
  Tier I is used to ensure existing and designated uses are maintained and protected. It does this by focusing on fully applying the water quality criteria and correcting problems using our existing regulatory and TMDL processes. Tier I applies to all waters and all sources of pollution.

- **Tier II**. WAC 173-201A-320
  Tier II is used to ensure that waters of a higher quality than the criteria assigned in the standards are not degraded unless such lowering of water quality is necessary and in the overriding public interest. Tier II applies only to new or expanded sources of pollution from specific types of activities directly regulated by Ecology (e.g., NPDES, 401, 404, Forest Practices). Any new or expanding dischargers that would cause a measurable degradation of water quality:
    a. Must go through a technology review to identify and apply any feasible alternatives to that degradation.
    b. Must show that overriding public benefits would occur from allowing the lowering of water quality.

In the past, Ecology determined that the LNFH needed a Tier II analysis, which LNFH completed in 2009.

Based on the definitions, it appears that a Tier I analysis could have been done instead of a Tier II analysis, since Icicle Creek is impaired for DO, pH, and temperature, and therefore not "of a higher quality than the criteria assigned in the standards." Moreover, permit requirements that used a TMDL should have been enough to satisfy the antidegradation analysis.

From the Washington Hatchery General Permit BE page 48. "A facility must first meet Tier I requirements. Existing and designated uses must be maintained and protected. No degradation may be allowed that would interfere with, or become injurious to, existing or designated uses, except as provided for in Chapter 173-201A WAC.

In order to protect and maintain designated and existing beneficial uses, a permitted discharge must comply with the narrative and numeric criteria of the State/Tribe's water quality standards, which address water quality limited waters. Water bodies not supporting existing or designated beneficial uses must be identified as water quality limited and a TMDL must be prepared for those pollutants causing the impairment. Discharge permits must contain limitations that are consistent with the WLAs in the EPA-approved TMDL. A permit with effluent limitations consistent with the WLA from an applicable TMDL will provide the level of water quality necessary to support existing and designated uses and therefore satisfies Tier 1 antidegradation requirements."

However, since a Tier II analysis has been completed, it may be possible to take elements of that report and use it in the antidegradation analysis in the 401 certification.

5. **For the LNFH facility, what is the baseline to compare current operations for anti- (1979, 2008)?**

6. **For the LNFH facility, can the 2008 anti-deg analysis be used for the 2017 401 cert? If no, can elements of it be used?**